

```

848 FISLLKTAKMTVKLTIHAEN?DSQAVPSAAGAASGEKKNSSQSLMVPQSG 897
||||||| |||| : |||| ||||. | |||:|.||. ||
2 FISLLKTAKATVKLIVRAENPACPAVPSSAVTVSGERKDNSTQPAVP... 48

898 SPEPESIRNTSRSSSTPAIFASDPATCPIIPGCETTIEISKGRITGLGLSIV 947
.:| |.||||||:|||||||:|||.|||||||
49 APDLEPIPSTSRSSSTPAVFASDPATCPIIPGCETTIGVSKGQTGLGLSIV 98

948 GGSDTLLGAFIIHEVYEEGAACKDGR LWAGDQILEVNGIDL RKATHDEAI 997
||||||| |||||||
99 GGSDTLLGAFIIHEVYEEGAACKDGR LWAGDQILEVNGIDL RKATHDEAI 148

998 NVLRQTPQVRVRLTYRDEAPYKEEEVCDTLTIE..LQKKPGKGLGLSIVG 1045
|||||||.|||||||:|||| ||| |||:|||||||
149 NVLRQTPQVRVRLTYRDEAPYKEEDVCDTFTIELQKRP GKGLGLSIVG 198

1046 KRNDTGVFVSDIVKGGIADPDGR LIQGQDILLVNGEDVRNASQEAVAALL 1095
||||||| ||||.|||||:|||||.|.|||||||
199 KRNDTGVFVSDIVKGGIADADGR LMGGDQILMVNGEDVRHATQEAVAALL 248

1096 KCSLGTVTLEVGR IKAGPFHSERRPSQTSQVSEGLSSFTFPLSGSSTSE 1145
||||| |||||:| |||||||.|||| ||||| ||| .|||
249 KCSLGAVTLEVGRVKAAPFHSERRPSQSSQVSESSLSSFTPPLSGINTSE 298

1146 SLESSSKKNALASEIQGLRTVEMKKGPTDSLGISIAGGVGSPLGDVPIFI 1195
||||.||||||| |||||.||| |||:|||||||
299 SLESNSKKNALASEIQR LRTVEIKKG PADSLGSIAGGVGSPLGDVPIFI 348

1196 AMMHPTGYAAQTQKL RVGDRIVTICGTSTEGMTHTQAVNLLKNASGS SIEM 1245
||||| |||||||
349 AMMHPNGVAAQTQKL RVGDRIVTICGTSTEGMTHTQAVNLMKNASGS IEV 398

1246 QVVAGGDVSVVTGHGHQEPASSSLSFTGLTSTSIFQDDLGP PQCKSITLER 1295
||||||| || |. |.|||||.||| ||||| |.|||:|
399 QVVAGGDVSVVTGHGHQELANPCLAF TGLTSSSIFPDGLGP PQSKTITLDR 448

1296 GPDGLGFSIVGGYGSPHGDLP IYKTVFAKGAASEDGRLKRGDQIIAVNG 1345
|||||||
449 GPDGLGFSIVGGYGSPHGDLP IYKTVFAKGAASEDGRLKRGDQIIAVNG 498

1346 QSLEGVTHEEAVAILKRTKGTVTLMVLS 1373
|||||||
499 QSLEGVTHEEAVAILKRTKGTVTLMVLS 526

```

921 ATCPIIPGCETTIEISKGRITGLGLSIVGGSOTLLGAFIIEHVEEAGAACK 970  
|||||  
1 ATCPIIPGCETTIEISKGRITGLGLSIVGGSOTLLGAFIIEHVEEAGAACK 50

971 DGRLWAGDQILEVNGIDLRKATHDEAINVLRQTPQRVRLTLRYDEAPYKE 1020  
|||||  
51 DGRLWAGDQILEVNGIDLRKATHDEAINVLRQTPQRVRLTLRYDEAPYKE 100

1021 EEVCDTLTIELQKKPGKGLGLSIVGKRNDTGVFVSDIVKGGIADPDGRLI 1070  
|||||  
101 EEVCDTLTIELQKKPGKGLGLSIVGKRNDTGVFVSDIVKGGIADADGRIM 150

1071 QGDQILLVNGEDVRNASQEAVALLKCSLGTVTLEVGRKAGPFHSERRP 1120  
|||||:|||||  
151 QGDQILMVNGEDVRNATQEAVALLKCSLGTVTLEVGRKAGPFHSERRP 200

1121 SQTSSQVSEGLSSFTFPLSGSSTSESLESSSKNALASEIQGLRTVEMKK 1170  
|||  
201 SQTSSQVSEGLSSFTFPLSGSSTSESLESSSKNALASEIQGLRTVEMKK 250

1171 GPTDSLGLSISAGGVGSPLDVPIFIAMHPTGVAAQTQKL RVGDRIVTIC 1220  
|||||  
251 GPTDSLGLSISAGGVGSPLDVPIFIAMHPTGVAAQTQKL RVGDRIVTIC 300

1221 GTSTEGMTHTQAVNLLKNASGSIEMQVVAGGDVSVVTGHHQEPASSSLSF 1270  
|||||  
301 GTSTEGMTHTQAVNLLKNASGSIEMQVVAGGDVSVVTGHHQEPASSSLSF 350

1271 TGLTSTSI FQDDLGP PQCKSITLERGP DGLGFSIVGGYGSPHGDLP IYVK 1320  
|||||  
351 TGLTSSSI FQDDLGP PQCKSITLERGP DGLGFSIVGGYGSPHGDLP IYVK 400

1321 TVFAKGAASEDGR LKRGDQIIAVNGQSLEGVTHEEAVAILKRTKGTVTLM 1370  
|||||  
401 TVFAKGAASEDGR LKRGDQIIAVNGQSLEGVTHEEAVAILKRTKGTVTLM 450

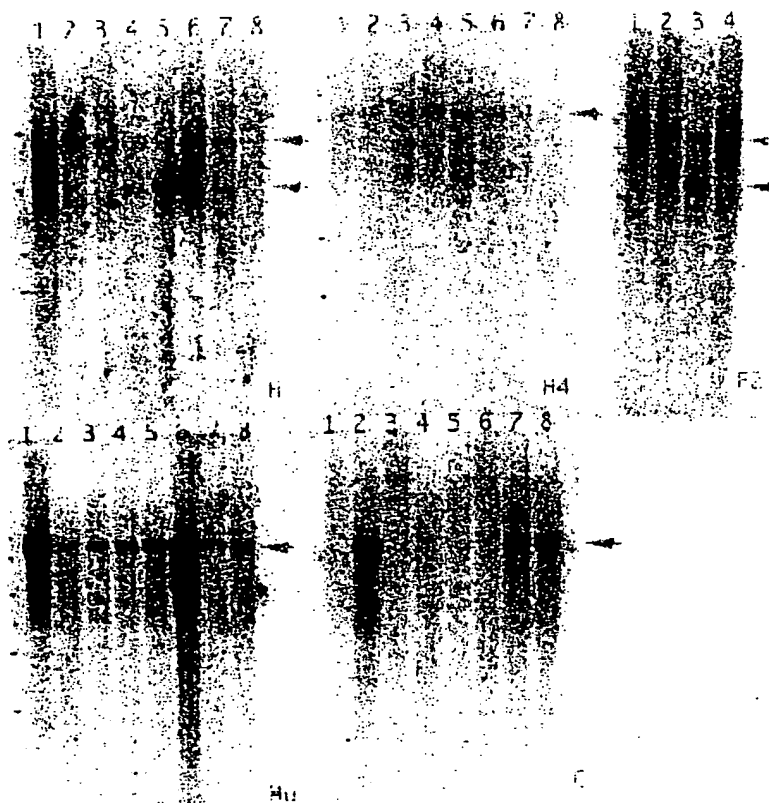
1371 VLS 1373  
|||  
451 VLS 453

3/26

Figure 3

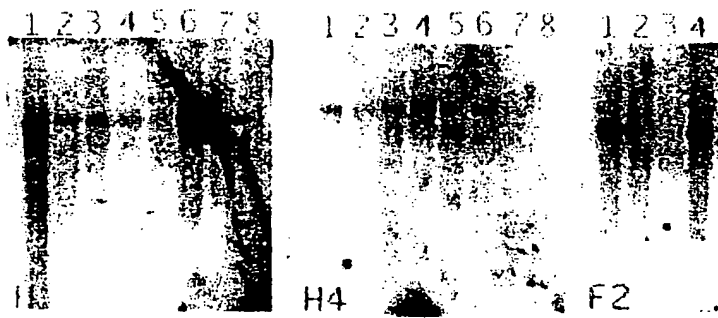
Figure 4

Figure 5



001120-66920560

Figure 6



00502600-021400

Figure 7

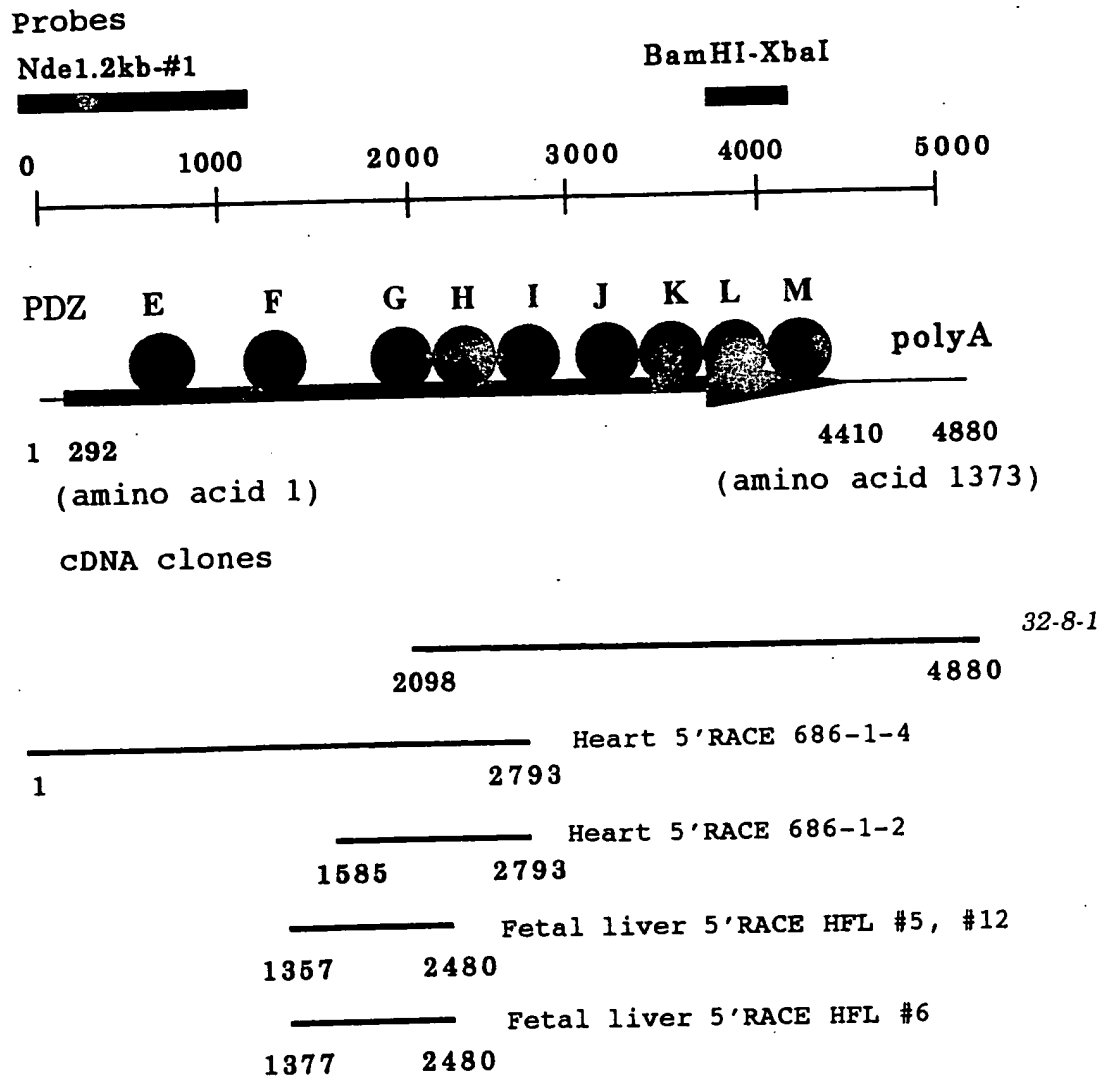


Figure 8

	1				50
PDZ-E	AGIQHIELE.	KGSKGLGFSI	LDYQD.....	PIDPASTVII	IRSLVPGGIA
PDZ-F	QNVSKESFER	TINIAKGNSS	LGMTV.....	SANKDGLGMI	VRSI IHGGAI
PDZ-G	NQPRRVELWR	EPSKSLGISI	VGGRGMSRL	SNGEVMRGIF	IKHVLEDSPA
PDZ-H	GELHMIELEK	GHS. GLGLSL	AGNKD.....	RSR. M. .SVF	IVGIDPNGAA
PDZ-I	KNVQHLELPK	DQG. GLGIAI	.....	SEEDTLSGVI	IKSLTEHGVA
PDZ-J	GCETTIEISK	GRT. GLGLSI	VGGSD.....	TLL. G. .AFI	IHEVYEEGAA
PDZ-K	CDTLTIELQK	KPGKGLGLSI	VGKRN.....	.....DTGVF	VSDIVKGGIA
PDZ-L	QGLRTVEMKK	GPTDSLGISI	AGGVG.....	SPL. GDVPIF	IAMMHPTGVA
PDZ-M	PQCKSITLER	GP. DGLGFSI	VGGYG.....	SPH. GDLPIY	VKTVFAKGAA

	51				96
PDZ-E	EKDGRLLP GD	RLMFVNDVNL	ENSSLEEAVE	ALKGAPSGTV	RIGVAK
PDZ-F	SRDGRIAIGD	CILSINEEST	ISVTNAQARA	MLRRHSLIGP	DIKITY
PDZ-G	GKNGTLKPGD	RIVEAPSQSE	SEPEKAPLCS	VPPPPPSAFA	EMGSDH
PDZ-H	GKDGRLQIAD	ELLEINGQIL	YGRSHQNASS	I IKCAP. SKV	KIIFIR
PDZ-I	ATDGRLKVG D	QILAVDDEIV	VGYP IEFIS	LLKTAKM. TV	KLTIHA
PDZ-J	CKDGRLWAGD	QILEVNGIDL	RKATHDEAIN	VLRQTP. QRV	RLTLYR
PDZ-K	DPDGRLIQGD	QILLVNGEDV	RNAS. QEAVA	ALLKCSLGTV	TLEVGR
PDZ-L	AQTQKL RVGD	RIVTICGTST	EGMTHTQAVN	LLKNAS. GSI	EMQVVA
PDZ-M	SEDGRLKRGD	QIIAVNGQSL	EGVTHEEAVA	ILKRTK. GTV	TLMVLS



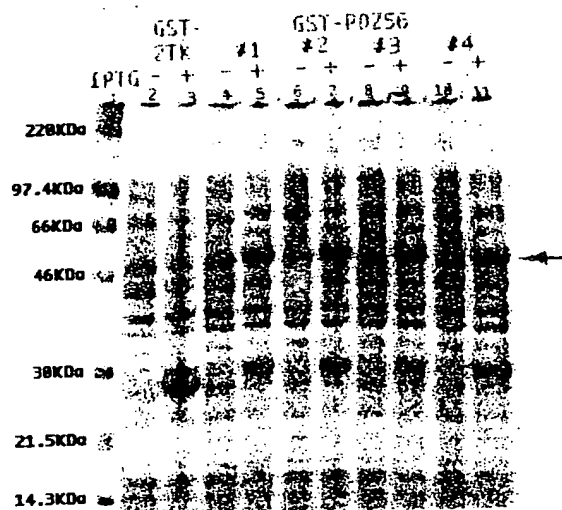
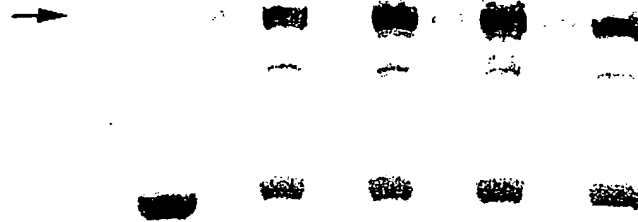
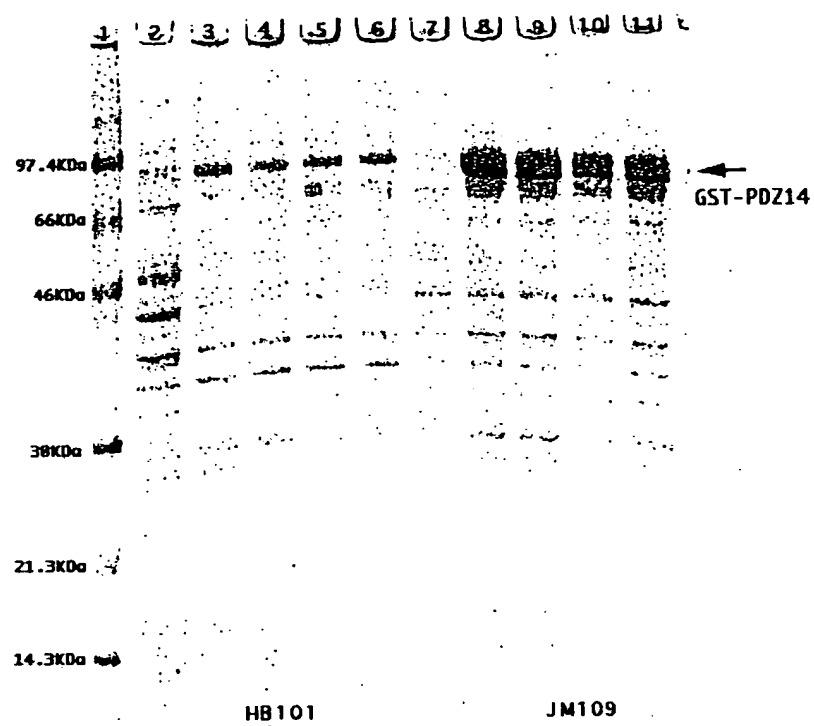
[illegible]

Figure 10

GST-2TK			GST-P0256							
			#1		#2		#3		#4	
IPTG	-	+	-	+	-	+	-	+	-	+
1	2	3	4	5	6	7	8	9	10	11



000000-000000

[illegible]

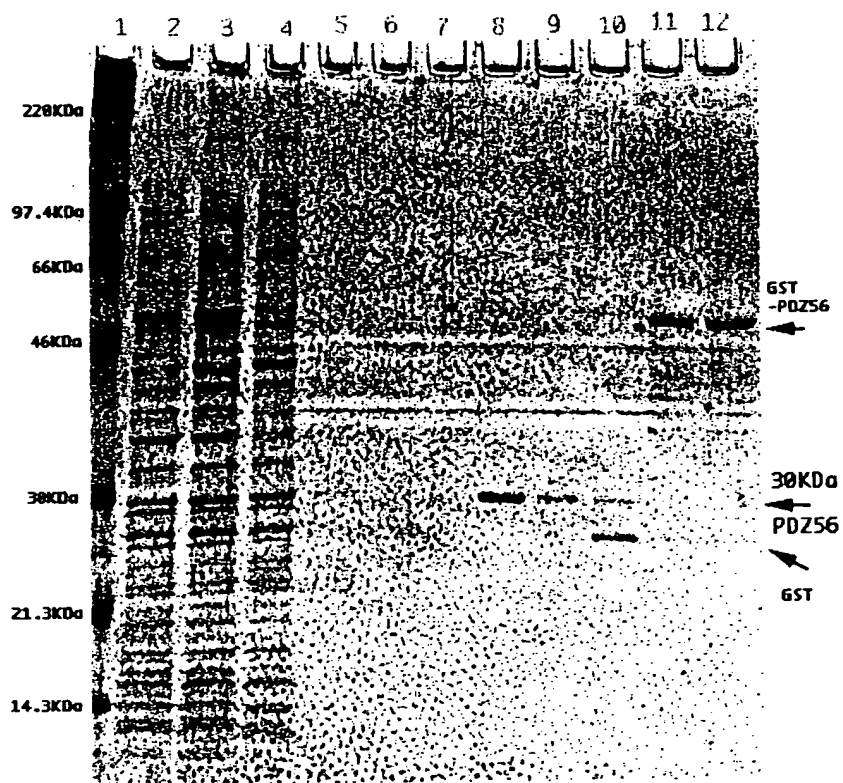
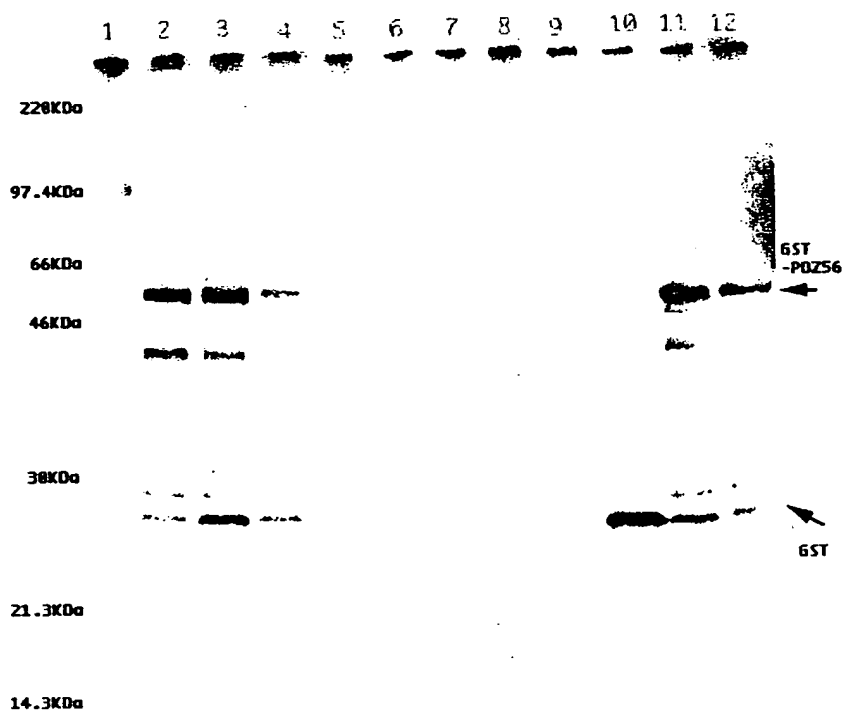
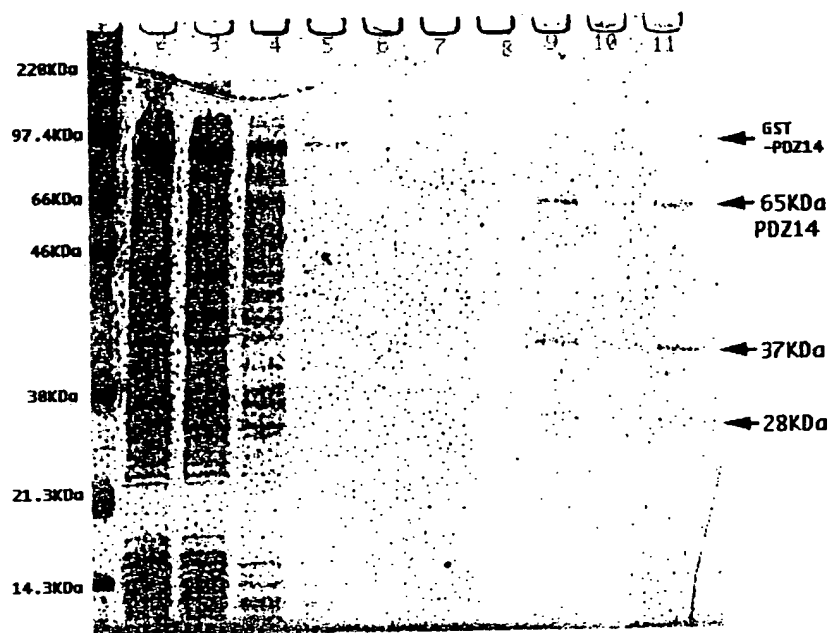


Figure 13



095066-0249097420-86920560

Figure 14



001722-86920510

001120 06320560

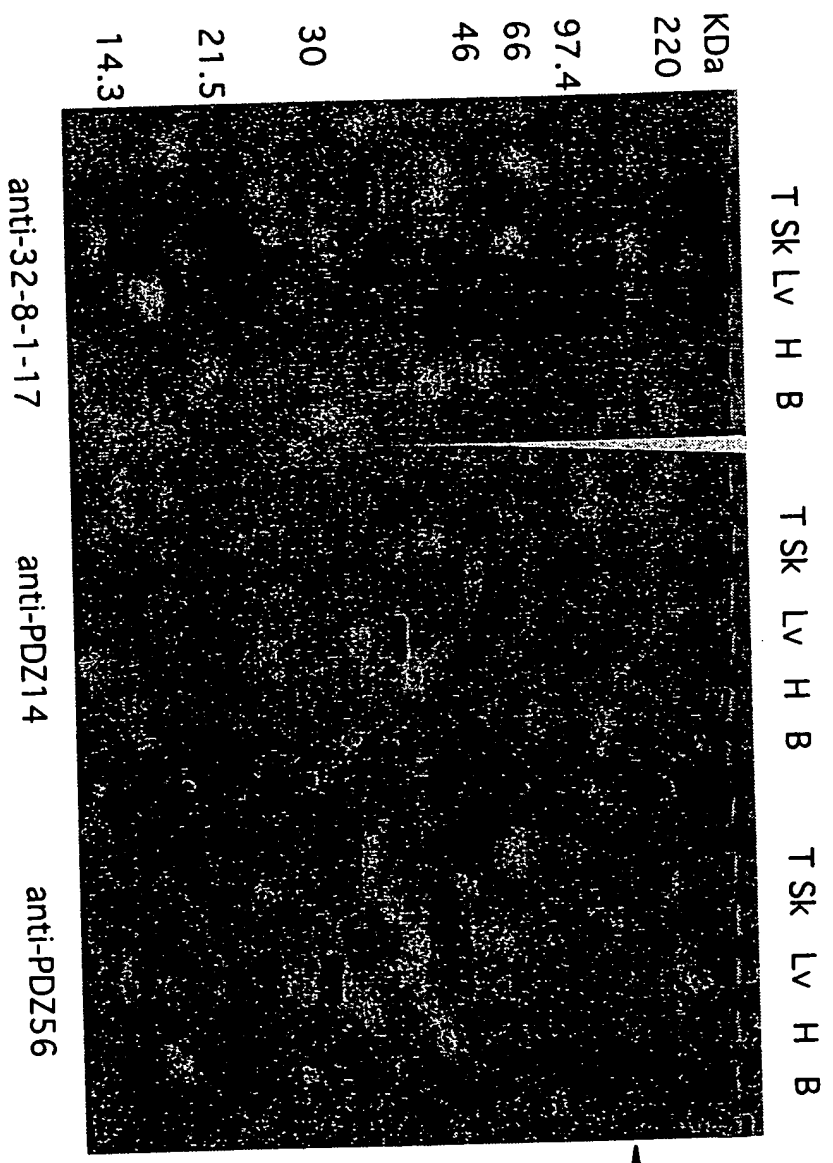


Figure 15

—

[illegible]



1  
 FH750 TTCTTTCTGT GCTACCCGAT TCAGCTGGA AGGCTCTGA GTACCTGCTT 50  
 FH850 TTCTTTCTGT GCTACCCGAT TCAGCTGGA AGGCTCTGA GTACCTGCTT  
 FH950 TTCTTTCTGT GCTACCCGAT TCAGCTGGA AGGCTCTGA GTACCTGCTT

51  
 FH750 GAACAGAGCT CCTGAGCTG TAACTCTAG TGTGTCTATC TTCMAATGT 100  
 FH850 GAACAGAGCT CCTGAGCTG TAACTCTAG TGTGTCTATC TTCMAATGT  
 FH950 GAACAGAGCT CCTGAGCTG TAACTCTAG TGTGTCTATC TTCMAATGT

101  
 FH750 ATCTAAGAA TCTTTTGAAA GCACTATTAA TATAGCAAA GGCMAITTTA 150  
 FH850 ATCTAAGAA TCTTTTGAAA GCACTATTAA TATAGCAAA GGCMAITTTA  
 FH950 ATCTAAGAA TCTTTTGAAA GCACTATTAA TATAGCAAA GGCMAITTTA

151  
 FH750 GCGTACGAAT GACAGTTAGT GCTAATTAAG ATGCGTTGCG GATGATGCTT 200  
 FH850 GCGTACGAAT GACAGTTAGT GCTAATTAAG ATGCGTTGCG GATGATGCTT  
 FH950 GCGTACGAAT GACAGTTAGT GCTAATTAAG ATGCGTTGCG GATGATGCTT

201  
 FH750 CGAAGCATT TTCATGAGG TCCCATTTAGT CGAATGCGC GCAITTCGCAT 250  
 FH850 CGAAGCATT TTCATGAGG TCCCATTTAGT CGAATGCGC GCAITTCGCAT  
 FH950 CGAAGCATT TTCATGAGG TCCCATTTAGT CGAATGCGC GCAITTCGCAT

251  
 FH750 TGGGCACTGC ATCTTTGCA TTAATGAAGA GTCTACCATC AGTGTAAACA 300  
 FH850 TGGGCACTGC ATCTTTGCA TTAATGAAGA GTCTACCATC AGTGTAAACA  
 FH950 TGGGCACTGC ATCTTTGCA TTAATGAAGA GTCTACCATC AGTGTAAACA

301  
 FH750 ATGCCAGGC ACGAGCTATG TTGAGAGAC ATTCTCTCAT TGCAGCTGAC 350  
 FH850 ATGCCAGGC ACGAGCTATG TTGAGAGAC ATTCTCTCAT TGCAGCTGAC  
 FH950 ATGCCAGGC ACGAGCTATG TTGAGAGAC ATTCTCTCAT TGCAGCTGAC

351  
 FH750 ATAAATTTA CTTATGTGCC TGCAGACAT TTGGAAGACT TCAAAATAG 400  
 FH850 ATAAATTTA CTTATGTGCC TGCAGACAT TTGGAAGACT TCAAAATAG  
 FH950 ATAAATTTA CTTATGTGCC TGCAGACAT TTGGAAGACT TCAAAATAG

401  
 FH750 CTGGGACAA CAATCTGAA GAGTAATGCC ACTGATATT TTTTCTTCAT 450  
 FH850 CTGGGACAA CAATCTGAA GAGTAATGCC ACTGATATT TTTTCTTCAT  
 FH950 CTGGGACAA CAATCTGAA GAGTAATGCC ACTGATATT TTTTCTTCAT

451  
 FH750 ACACTGGCAG AGACATTGCA GAATTACAG AGCAGAGAGA GCGAGAGCGT 500  
 FH850 ACACTGGCAG AGACATTGCA GAATTACAG AGCAGAGAGA GCGAGAGCGT  
 FH950 ACACTGGCAG AGACATTGCA GAATTACAG AGCAGAGAGA GCGAGAGCGT

501  
 FH750 GAAGAAAGC AACTTCAAA CACAGCATAT AGCAATTGCA ATCAGCCAG 550  
 FH850 GAAGAAAGC AACTTCAAA CACAGCATAT AGCAATTGCA ATCAGCCAG  
 FH950 GAAGAAAGC AACTTCAAA CACAGCATAT AGCAATTGCA ATCAGCCAG

551  
 FH750 GCGGCTGCA CTTGAGAG AGCCAGCAA ATCTTTAGGC ATCAGCATTC 600  
 FH850 GCGGCTGCA CTTGAGAG AGCCAGCAA ATCTTTAGGC ATCAGCATTC  
 FH950 GCGGCTGCA CTTGAGAG AGCCAGCAA ATCTTTAGGC ATCAGCATTC

601  
 FH750 TTGCTGAGC AGGATGCGG AGTCAGCTTA GCAATGAGA AGTATGAGG 650  
 FH850 TTGCTGAGC AGGATGCGG AGTCAGCTTA GCAATGAGA AGTATGAGG  
 FH950 TTGCTGAGC AGGATGCGG AGTCAGCTTA GCAATGAGA AGTATGAGG

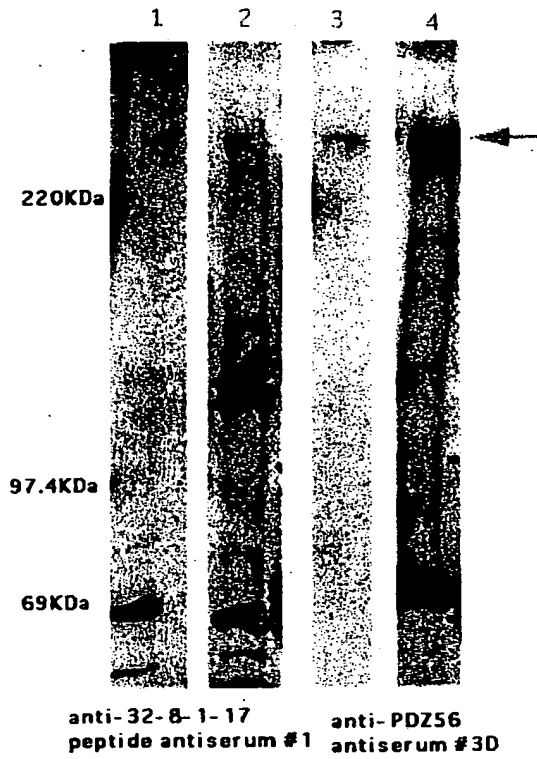
651  
 FH750 GGCATTTTCA TCAACATGT TCTGAAAGT AGTCAGCTG GCAAAATTC 700  
 FH850 GGCATTTTCA TCAACATGT TCTGAAAGT AGTCAGCTG GCAAAATTC  
 FH950 GGCATTTTCA TCAACATGT TCTGAAAGT AGTCAGCTG GCAAAATTC

Figure 17

	701		750
FH750	ACCTTGAAA CCTGAGATA GAATCCTAGA G_____		
FH850	ACCTTGAAA CCTGAGATA GAATCCTAGA CCTGATGCA ATGCACTCA		
FH950	ACCTTGAAA CCTGAGATA GAATCCTAGA CCTGATGCA ATGCACTCA		
	751		800
FH750	_____		
FH850	GACATCCAG CCATGACAA CCTGTGAG CCATTGCA ACCAGCAAC		
FH950	GACATCCAG CCATGACAA CCTGTGAG CCATTGCA ACCAGCAAC		
	801		850
FH750	_____		
FH850	CCTGTAGCT TTAATGATA GACCTTATT ACAGACCAAG G_____		
FH950	CCTGTAGCT TTAATGATA GACCTTATT ACAGACCA GCAATCCC		
	851		900
FH750	_____		
FH850	_____		
FH950	TTTCCCTCC TTCTGACA ACCTTTACC TAACTAAC TTCAGCACA		
	901		950
FH750	_____		GCACCCACT
FH850	_____		GCACCCACT
FH950	CTAACCAATT TCTGACTCT CTACAAATCA ACCCCGACA GGCACCCACT		
	951		965
FH750	CAGTCAGAGT CAGAG		
FH850	CAGTCAGAGT CAGAG		
FH950	CAGTCAGAGT CAGAG		

Figure 18

Figure 19



007720-86920560



1618 ATCP11PCCTTIEISKRTGLGLSIVGSDTLGAPT11HEVVEGAMCK 1667  
 1 ATCP11PCCTTIEISKRTGLGLSIVGSDTLGAPT11HEVVEGAMCK 50  
 1668 DGR1MAGDQILEVNCIDLKRAHDEAINVLRQTPQRRLTLYRDEAPYKE 1717  
 51 DGR1MAGDQILEVNCIDLKRAHDEAINVLRQTPQRRLTLYRDEAPYKE 100  
 1718 EEVCDTLTIELAKPKGKGLSLVCKRNDTCVFSD1VKG1ADPGRLL 1767  
 101 EEVCDTLTIELAKPKGKGLSLVCKRNDTCVFSD1VKG1ADPGRLL 150  
 1768 QGDQILLVNGEDVRNASQEAVALLKSLGTVTLEVGRIKAGPHSERRP 1817  
 151 QGDQILLVNGEDVRNASQEAVALLKSLGTVTLEVGRIKAGPHSERRP 200  
 1818 SQTQVSECSLSFTFPLSCSSTSESLSSSKKNALASE1QCLRTVEWCK 1867  
 201 SQTQVSECSLSFTFPLSCSSTSESLSSSKKNALASE1QCLRTVEWCK 250  
 1868 GP7DSLGISIAGVCSPLGDVP1FIAMAPTCVAAQTQKLRVGR1VTIC 1917  
 251 GP7DSLGISIAGVCSPLGDVP1FIAMAPTCVAAQTQKLRVGR1VTIC 300  
 1918 GTSTEGMHTQAVNLLKXASCSIEAQVYAGGVSVYTGHHQEPASSLSF 1967  
 301 GTSTEGMHTQAVNLLKXASCSIEAQVYAGGVSVYTGHHQEPASSLSF 350  
 1968 TGLJTS1FQDULCPQCKS1TLERGPDLGFS1VGVGSPHCDLP1YVK 2017  
 351 TGLJTS1FQDULCPQCKS1TLERGPDLGFS1VGVGSPHCDLP1YVK 400  
 2068 TVFAKGA5EDGR1KRGQ11AVNGSLEGT7HEEVA1LKRTKGTVTLL 2067  
 401 TVFAKGA5EDGR1KRGQ11AVNGSLEGT7HEEVA1LKRTKGTVTLL 450  
 2068 VLS 2070  
 451 VLS 453

Figure 21

[illegible]

[illegible]

237 / 26

1750 FVSDIVKCGIADPDGRLIQQDQILLVNGEDVYRNASQEAIVALLKCSLCTV 1799  
 1734 FVSDIVKCGIADADGRIMQDQILLVNGEDVYRNATQEAIVALLKCSLCTV 1783  
 1800 TLEVGRKAKAPHSERRPSQTSQVSEGLSSFTFPLSGSSTSSESLSK 1849  
 1784 TLEVGRKAKAPHSERRPSQTSQVSEGLSSFTFPLSGSHTSESSESXK 1833  
 1850 KMLASEIQGLRTVEAKKGPDSLCISLAGGCSPLGDVPLFIAAHPTG 1899  
 1834 KMLASEIQGLRTVEIKKGPADALCLSIAGGCSPLGDVPLFIAAHPTG 1883  
 1900 VAAQTQKLRVGRIVTICGTSTEGMTHQAVNLLKNASGSTEKQVACD 1949  
 1884 VAAQTQKLRVGRIVTICGTSTEGMTHQAVNLLKNASGSTEQVACD 1933  
 1950 VSVVTGHADEPASSSLSFTGLTSTIPQDGLCPPOCKSTTERGPDCLF 1999  
 1934 VSVVTGHADEPASSSLSFTGLTSTIPQDGLCPPOCKSTTERGPDCLF 1983  
 2000 SIVGCSPHGDLPIVATVFAKGAASEXGRKRGQIIAVNGSLECVT 2049  
 1984 SIVGCSPHGDLPIVATVFAKGAASEXGRKRGQIIAVNGSLECVT 2033  
 2050 HEEAVAILKRTKCTVTLMAS 2070  
 2034 HEEAVAILKRTKCTVTLMAS 2054

Figure 24



Figure 25

1						50
PDZ-A	RHVEVFELLK	.PPSGGLGFS	VVGLRS....	.ENRGEL.GI	FVQEIQEGSV	
PDZ-B	QHMETIEL.V	.NDGSGLGFG	IIGGK.....	.....ATGV	IVKTILPGGV	
PDZ-C	SETFDVELTK	.N.VQGLGIT	IAGYIG....	.DKKLEPSGI	FVKSITKSSA	
PDZ-D	YEIVVAHVSK	FSENSGLGIS	LEATVGGH..	.....	FIRSVLPEGP	
PDZ-E	AGIQHIMLEK	.G.SKGLGFS	ILDYQD....	.PIDPASTVI	IIRSLVPGGI	
PDZ-F	SFERTINIAK	.G.NSSLGTM	VSANKDGL..	.....GM	IVRSIIHGGA	
PDZ-G	NQPRRVELWR	.EPSKSLGIS	IVGGRGMGSR	LSNGEVMRGI	FIKHVLEDRP	
PDZ-H	GELHMIELEK	.G.HSGLGLS	LAG.....	.NKDRSRMSV	FIVGIDPNGA	
PDZ-I	KNVQHLELPK	.D.QGGLGIA	IS.....	..EEDTLSGV	IIKSLTEHGV	
PDZ-J	GCETTIEISK	.G.RTGLGLS	IVG.....	GSDTLGAF	IIHEVYEEGA	
PDZ-K	CDTLTIELQK	.KPGKGLGLS	IVGKRN....	.....DTGV	FVSDIVKGGI	
PDZ-L	QGLRTVEMKK	.GPTDSLGIS	IAGGVG....	.SPLGDV.PI	FIAMMHPTGV	
PDZ-M	PQCKSITLER	.GP.DGLGFS	IVGGYG....	.SPHGDL.PI	YVKTVFAKGA	

	51		97
PDZ-A	AHRDGR LKET	DQILAINGQA	LDQTITHQQA ISILQKAKDT VQLVIAR
PDZ-B	ADQHGR LCSG	DHILKIGDTD	LA. GMSSEQV AQVLRQCGNR VKLMIAR
PDZ-C	VEHDGRIQIG	DQIIAVDGTN	L. QGFTNQQA VEVLRHTGQT VLLTLMR
PDZ-D	VGHSGKLFSG	DELLEVNGIT	LL. GENHQDV VNILKELPIE VTMVCCR
PDZ-E	AEKDGRLLPG	DRLMFVNDVN	L. ENSSLEEA VEALKGAPSG TVRIGVA
PDZ-F	ISRDGRIAIG	DCILSINEES	TI. SVTNAQA RAMLRHSLI GPDIKIT
PDZ-G	AGKNGTLKPG	DRIVEVDGMD	LRD. ASHEQA VEAIRKAGNP VVFMVQS
PDZ-H	AGKDGR LQIA	DELLEINGOI	L. YGRSHQNA SSI IKCAPSK VKI IFIR
PDZ-I	AATDGR LKVG	DQILAVDDEI	V. VGYP IEFK ISLLKTAKMT VKLTIHA
PDZ-J	ACKDGR LWAG	DQILEVNGID	L. RKATHDEA INVLRQTPQR VRLTLYR
PDZ-K	ADPDGR LIQG	DQILLVNGED	VR. NASQEAV AALLKCSLGT VTLEVGR
PDZ-L	AAQTQKLRVG	DRIVTICGTS	T. EGMTHTQA VNLLKNASGS IEMQVVA
PDZ-M	ASEDGR LKRG	DQIIAVNGQS	L. EGVTHEEA VAILKRTKGT VTLMVLS

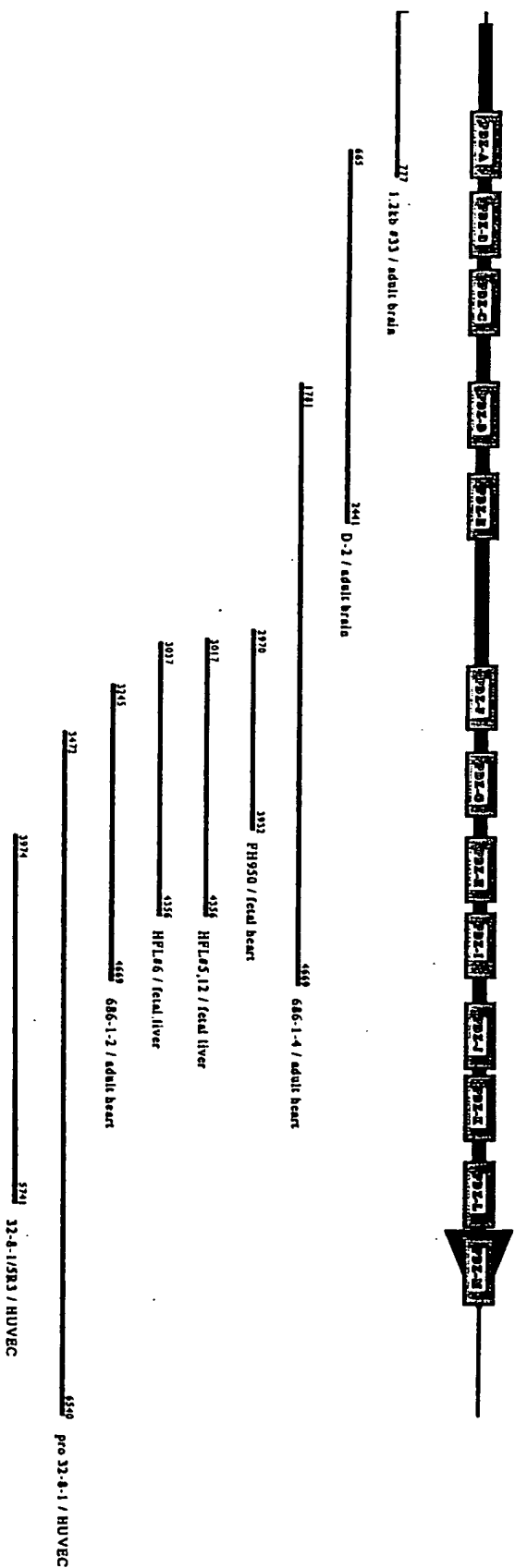


Figure 26